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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,877	05/30/2001	Jesse Ambrose	SIEB019/01US	4487
25096	7590	06/02/2006	EXAMINER	
PERKINS COIE LLP			QUELER, ADAM M	
PATENT-SEA			ART UNIT	
P.O. BOX 1247			2178	
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DATE MAILED: 06/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/866,877

Applicant(s)

AMBROSE ET AL.

Examiner

Adam M. Queler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-33 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 21-33 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: Amendment filed 03/16/2006.
2. Claims 21-33 are pending. Claims 21 and 28 are independent claims.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. **Claims 28-33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.** The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 28 describes creating a separate thread for a thin client when a request is received. The specification does not describe such "creation."

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claim 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

"Thin client" as used in the claims appears to have a different meaning then set forth in the specification. Page 11, line 13 to page 20, line 20 clearly defines thin clients as applications in which the main tiers of the application are separated from each other. This section of the specification describes a thin client as the whole application, i.e. the GUI, business logic and

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database (p. 11, ll. 13-15). The plain meaning of “thin client” to a skilled artisan would generally mean the GUI portion above, e.g. the actual client software. The thin client Applicant defines more aptly describes a thin-client architecture, nomenclature which Applicant also uses (p. 11, line 27-28). Applicant does appear to correctly redefine (or define) this term in the specification. However, the claim appears to use the term “thin client” to merely mean the GUI or client portion, or at best, certainly not the entire application. This proved at least by the business logic residing outside the thin client (claim 1) and deploying applications to thin clients (claim 28), neither or which makes sense give Applicant’s definition above. For examination purposes, thin client will be taken to mean the client software or GUI.

Regardless of the true meaning the term "thin client" in claim 21, for example is a relative term which renders the claim indefinite. The term "thin client" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Applicant however does allege that the definition in the specification should be used. Applicant points to a 9 page passage that allegedly sets forth the standard for ascertaining the requisite degree. Ignoring the fact the claims do not seem to make sense using this definition, this section itself is filled with relative terms that seek to define a thin client. For example, “a very small software footprint”, “minimal amounts of RAM and CPU”. These relative terms cannot set the requisite standard since they themselves are relative terms.

Claim 21 recites the limitation "multiple thin clients" in line 8 and “each thin client” in line 8, both terms implies a plurality of thin clients. However, the claimed system only includes one thin client (line 1). There is insufficient antecedent basis for this limitation in the claim.

Claim 28 suffers from a lack of written description as described above. As such is not clear that this is what the Applicant intended to claim, and as such is indefinite. Typically, in the art at the time of the invention, such managers, did not create threads as requests came in, but assigned them out of a waiting state to a active state. Such an activation will be taken to mean “creating” for examining purposes only.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. **Claims 28-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

Claims 28-33 are rejected as being directed to an abstract idea with no practical application. In order to be considered a practical application of an abstract idea, the claims must provide a practical application that produces a useful, tangible and concrete result. See “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” § IV.C.2.b. In this case, it is not clear what “providing an object manager” entails, and if it is in fact a result or an element that is already there. While the “creating” of line 8, could be considered a result, if a request is not received the thread is not created and therefore the claim does not always produce a useful concrete and tangible result.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. **Claims 21, 22, and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Bayeh et al. (US006633914B1).**

Regarding independent claim(s) 21, Bayeh teaches a client computer (Fig. 1), comprising a memory (col. 3, line 44) storing a thin client (col. 4, ll. 16-18, web client). Bayeh teaches a server comprising an object manager, the web server, comprising business objects that contain business logic, the servlets (col. 4, ll. 49-64). Bayeh teaches the server handles the requests and dispatches them to the servlets or objects (col. 5, ll. 2-15), as well tracks whether they are in-use (col. 1, ll. 60-62), and therefore provides common control and monitoring. Bayeh teaches the object manager maintains a status of each thin client making the request in a corresponding thread (col. 6, ll. 5-15). By virtue of the definition in the claims, this maintaining constitutes handling requests to access the business objects.

Regarding independent claim(s) 28, Bayeh teaches providing an object manager, the web server, comprising business objects that contain business logic, the servlets (col. 4, ll. 49-64). Bayeh teaches the server handles the requests and dispatches them to the servlets or objects (col. 5, ll. 2-15), as well tracks whether they are in-use (col. 1, ll. 60-62), and therefore provides common control and monitoring. In the normal course of operation, when a request is not received, the steps in the claim are not performed and therefore Bayeh anticipates the entire when clause (lines 6-9). However, for the sake of argument, Bayeh teaches activating a thread for the client and maintains a status of each thin client making the request in a corresponding thread (col. 6, ll. 5-15). By virtue of the definition in the claims, this maintaining constitutes processing requests to access the business objects.

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Regarding dependent claim(s) 22, Bayeh teaches the object manger is multi-threaded, and therefore inherently multi-tasking (col. 1, ll. 52-55).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bayeh in view of Applicant's Admitted Prior Art.

Regarding dependent claim(s) 23 and 24, Bayeh does not explicitly teach a particular web client. Applicant admits that both Java and ActiveX were previously used for web clients (p. 1, lines 20-23. It would have been obvious to one of ordinary skill in the art at the time of the invention to use either one as the client for what Applicant admits was the previously known advantages of maintaining the sever GUI, and taking advantage of TCP/IP in a business friendly manner, as well as being a previously known accepted web client.

12. Claims 25-27, and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bayeh

Regarding dependent claim(s) 25-27 and 31-33, Bayeh does expressly describe what category applications the servlets are performing. However this difference is only found in the nonfunctional descriptive material and does not alter how the system functions (e.g., the object manager performs the same task regardless of the type of application the servlet describes). Thus, this descriptive material will not distinguish the claimed invention from the prior art in

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terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to handle requests to access objects that are a particular category of application because the type of application does not alter how the system functions and because the subjective interpretation of the application does not patentably distinguish the claimed invention.

Regarding dependent claim(s) 29, Bayeh does not specifically mention encryption, however does operate under the HTTP protocol. Official Notice is taken that HTTPS an encrypted version of HTML was well-known and frequently used in place of HTTP when security was necessary at the time of the invention. It would have been obvious to one of ordinary skill in the art at the time of the invention to use HTTPS rather the HTTP to prevent unauthorized data intrusion, a well-known desirable goal at the time of the invention.

Regarding dependent claim(s) 30, Bayeh does not specifically mention authentication, however does operate under the HTTP protocol. Official Notice is taken that HTTP requests requiring authentication were well-known and frequently used when security was necessary at the time of the invention. It would have been obvious to one of ordinary skill in the art at the time of the invention to use HTTP authentication to prevent unauthorized data intrusion, a well-known desirable goal at the time of the invention.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Bayeh as applied to claims 3 and 9 above, and further in view of Hernandez, Database

Design for Mere Mortals.

Regarding dependent claim(s) 5, 12, Bayeh teaches a way of managing web server requests, including databases. Bayeh does not explicitly disclose business rules. Bayeh is a general improvement on server request handling, and does not teach or aim to teach a particular application. As this is Bayeh's teaching, one would turn to the prior art for a particular application implementation. Hernandez discloses business rules (whole document). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Hernandez and Bayeh, having business rules for a database was well-known and important part of basic database design, shown at least by the fact that Hernandez is an introductory database book. In addition, they were desirable to have to ensure that the data is semantically correct (p.1, para. 40.).

15. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bayeh as applied to claim 15 above, and further in view of Applicant's Admitted Prior Art.

Regarding dependent claim(s) 18-20, Bayeh teaches a way of managing web server requests.

Bayeh does not explicitly disclose a particular server application. Bayeh is a general improvement on server request handling, and does not teach or aim to teach a particular application. As this is Bayeh's teaching, one would turn to the prior art for a particular application implementation. Applicant admits that the types of application were well-known in

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the art at the time of the invention (pp. 5-6.) It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Applicant's Admitted Prior Art with the improvement of Bayeh, as Bayeh was an improvement for all types of server request applications.

Response to Arguments

Regarding Applicant's remarks on §112, 2nd para rejections:

Applicant alleges the page 11, line 13 to page 20, line 20 clearly defines thin clients as applications in which the main tiers of the application are separated from each other. This section of the specification describes a thin client as the whole application, i.e. the GUI, business logic and database (p. 11, ll. 13-15). The plain meaning of "thin client" to a skilled artisan would generally mean the GUI portion above, e.g. the actual client software. The thin client Applicant defines more aptly describes a thin-client architecture, nomenclature which Applicant also uses (p. 11, line 27-28). Applicant does appear to correctly redefine (or define) this term in the specification. However, the claim appears to use the term "thin client" to merely mean the GUI or client portion, or at best, certainly not the entire application. This proved at least by the business logic residing outside the thin client (claim 1) and deploying applications to thin clients (claim 28), neither or which makes sense give Applicant's definition above.

Applicant alleges that this specific definition of thin client provides a standard for determining which clients are thin or not. If the plain meaning is used as explained above (thin client application) one would still not know how much processing could be done on client. The lower limit is clearly a dumb terminal, but it is not clear how much logic is required to make something not a thin client. For example, a thin client could be a dumb terminal, an applet, or a

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windows program that connects to a server. The question the specification does not answer is what must a client contain to not be considered a thin client?

Applicant however does allege that the definition in the specification should be used. Applicant points to a 9 page passage that allegedly sets forth the standard for ascertaining the requisite degree. Ignoring the fact the claims do not seem to make sense using this definition, this section itself is filled with relative terms that seek to define a thin client. For example, “a very small software footprint”, “minimal amounts of RAM and CPU”. These relative terms cannot set the requisite standard since they themselves are relative terms.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

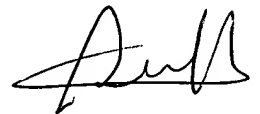
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17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam M. Queler whose telephone number is (571) 272-4140.

The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



AQ

STEPHEN HONG
SUPERVISORY PATENT EXAMINER